# *WATER SUPPLY IN SINAI AND PALESTINE.*

*By* MAJOR G. STREETEN, R.E.

*Sources of Water.*—From the Suez Canal to the River Auja, which flows into the sea just north of Jaffa, no fewer than 10 different sources of water supply were used, viz. :—

(1). The Nile. The "sweet water canal" runs parallel with the Suez Canal and draws its water from the Nile. Water from it was used during the first stages at Kantara, the water being siphoned under the Suez Canal and filtered on the East bank.

(2). Sea water purified by condensing. A condenser was set up and used at Mahamduja.

(3). Wells in the sand dunes giving more or less brackish water.

(4). Wells in the sand dunes giving nearly fresh water. In this case a clay strata was always found immediately underneath the sand.

(5). Deep wells to permanent water level beneath the clay strata.

(6). Lakes and pools.

(7). Wadis.*

(8). Cisterns.

(9). Springs.

(10). The River Auja and shallow wells on its banks.

*Description of Route.—Suez Canal to El Arish.*—The chain-dotted black line on the accompanying sketch-maps gives the approximate route followed by the division in 1916 and 1917.

The country between the Suez Canal and the Wadi el Arish has a character entirely different from the remainder of the route. Here there is a coastal strip in which none but very brackish water could be found. The 'Sabket el Bardawil, an extensive salt marsh, occupies a large portion of this strip. Near Mahamdiza in particular many attempts were made both with the Norton tube and by digging to find water fit for animals. In many cases the water was found at first to be sweet enough but soon became too brackish.

South of this coastal strip, bounded by a fairly clearly defined line, is a strip of country in which slightly brackish water may be obtained by digging. The depth varies a great deal but in most districts there are places where water can be found at between 5 ft. and 12 ft. South of this again the sand dunes rise very high and there is no water to be found.

The old northern caravan route follows the central strip and the railway has been laid alongside it. The water, being slightly brackish, is on the whole unfit for human consumption. The Bedouins drink it as no doubt did the Turks but it is too salt for Europeans, though our troops drank it in cases of necessity to a small extent.

It was necessary therefore to obtain drinking water from

* A dry river bed down which water only flows immediately after rain.

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